persist for a long time, and as these resemble lutein cells so closely, these may apparently exist in the midst of perfectly normal stroma. Hyaline degeneration of the theca in the normal ovary is closely related to similar degeneration of the surrounding arterioles, so that the latter cannot be regarded as strictly a pathological process.

Constipation as a Cause of Intrauterine Infection.—CAPALDI (*Arch. di ost. e gin.; Zentralblatt für Gynäkologie,* 1905, No. 8) conducted a series of experiments in animals in order to determine the effect of coprostasis on uterine infection. Complete obstruction was produced by suturing the anus. Both pregnant and non-pregnant guinea-pigs were used. Almost without exception colon bacilli were found in the uterus, amniotic fluid and peritoneal cavity after death. Although these experiments do not furnish conclusive evidence with regard to the effects of obstinate constipation in the human female, the writer believes that they point a moral as to the importance of careful regulation of the bowels in the non-gravid as well as in pregnant women.

[Another evidence of the importance of the question of intestinal toxæmia which gynecologists and obstetricians are beginning to appreciate.—H. C. C.]

OPHTHALMOLOGY.

UNDER THE CHARGE OF

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Some Considerations upon Primary Keratoconus.—WICKERKIEWICZ (*Arch. d'oph.,* February, 1905) discusses certain doubtful points in the pathology and course of this affection.

The form consecutive to other diseases is not very rare; it is less easy of explanation than the primary. The latter is of rare occurrence. Both eyes are usually, though not always, affected.

It is uncertain when primary keratoconus was first described; even to this day the two forms are confounded. A Tübingen dissertation of the year 1748 by Mauchart, under the title of "Staphyloma Diaphanum," appears to show the first traces of a certain diagnosis. It seems beyond doubt that keratoconus is not necessarily congenital, as Ammon believed, but its mode of origin has not been satisfactorily explained yet. It has been generally attributed with Arlt to a diminution in the resistance of the cornea. Opinions differ as to the causes of this supposed weakening. By some this weakening is ascribed to the corneal tissue, by others to defective innervation, while still others invoke increase of tension; but even if any or all of these conditions are present, no one has shown how they have come to pass. As a matter of fact, careful examination does show a very slight increase in the tension; but the latter is in itself inadequate, without the presence of another factor, to cause the cornea to yield. What is this factor? This point has not yet been adequately cleared up. It is not inflammation (Stellwag), nor a lesion of the endothelium (Panas). Wickerkiewicz believes that it is a disturbance in the nutrition of the tissues which affects the central portion of the cornea, generally the thinnest part of that membrane. Traumatism has also been invoked as the original cause of keratoconus, but this has not been proven.

It is generally stated that the centre of the cornea becomes conical. But it is not the very centre itself which yields, but a neighboring region, situated, as a rule, at the inferoexternal portion of the cornea. How explain this fact? Gullstrand invokes the excess of extraocular pressure over the intraocular tension. Wickerkiewicz considers such inequality to be due to the pressure of the upper lid upon the globe; this becomes all the greater because of the myopia which results from the development of the cone and the patient's consequent attempts to cut off the disturbing peripheral rays by the lids. Such pressure favors the displacement downward of the apex of the cone.

Based upon experiments upon rabbits, it is held by some that the cone develops in consequence of an ectasia after a wound of the endothelium and basal membrane, while others regard it as due to an œdematous thickening of the cornea. It is difficult to apply these conclusions to the human eye, the cornea of which is thinnest at the centre, where its resistance is feeblest.

Of a special and rare phenomenon which has been occasionally noted, viz., rhythmic variation in the size of the images due to a pulsation of the apex of the cone, Wickerkiewicz was at first inclined to explain the phenomenon by slight movements of the head caused by the beating of the pulse; in one case, however, the ophthalmometer showed objectively continual rhythmic variations in the reflected images, due to rhythmic changes of form in the apex of the cone. This pulsation is analogous to what occurs where an opening leads to a cavity surrounded by fixed walls and containing vascular tissues or liquids. This is precisely the case in an eye affected with keratoconus. The opening is represented by the anterior chamber's extension into the cone; the cavity surrounded by fixed walls is the interior of the eye with its choroidal and retinal lining. That this phenomenon is not present in every case is due to the fact that the ectatic cornea is not sufficiently thinned to permit its appearance.

The diagnosis of keratoconus, even in its first beginning, is easy by means of skiascopy.

The writer has obtained good results from iridectomy in some cases, and the galvanocautery in others. The number of his personal observations is too few to permit him to pronounce definitely upon the respective values of caustics, the cautery, and iridectomy.

The Neuritic Form of Albuminuria Retinitis.—BALLENTINE, Glasgow (*The Ophthalmoscope*, April, 1905), calls attention to the rarity of optic neuritis as the only ophthalmoscopic change in Bright's disease. The typical ophthalmoscopic picture is one of prominent inflammation of the optic disk not extending into the surrounding retina; in fact, closely resembling choked disk of intracranial tumor, for which it